

5,780,883). Consideration of the application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-11 and 21-26 are pending the application. No claims have been canceled.

Claims 1 and 21 have been amended. Claims 27-43 have been added.

The Examiner has rejected claims 1-11 under 35 U.S.C. § 103(a) as being unpatentable over Tran. This rejection by the Examiner is respectfully traversed.

In response to Applicant's arguments in the previous response, mailed on August 22, 2000, that Tran does not disclose partially overlying polysilicon landing sites, the Examiner asserts that "Tran discloses in Figure 8 ... partially overlying silicon gate to form N-type and P-type transistors." While Applicant respectfully disagrees with the Examiner, in order to further prosecution, Applicant has, nonetheless, amended claim 1 to clarify and further distinguish that claim from the cited patent.

In this regard, as Applicant has specifically asserted in the previous two responses, claim 1 patentably distinguishes from Tran in at least the aspect of "diffusion regions having partially overlying polysilicon landing sites to form N-type and P-type transistors." In this respect, though the invention is not limited to any particular embodiment, comparing FIG. 1 of the application with Fig. 8 of the cited patent is illustrative of this point. FIG. 1 of the application illustrates "partially overlying" polysilicon landing sites overlying both similarly sized N-diffusion and P-diffusion regions to form both N-type transistor and a P-type transistors. In contrast, Fig. 8 of Tran illustrates polysilicon gates that form only an N-type or P-type transistor. That is, the polysilicon gates in Tran form either an N-type transistor or a P-type transistor, while the partially overlying polysilicon landing sites, such as in FIG. 1 of the application, form both similarly sized N-type and P-type transistors. Further in this regard, as was discussed in Applicant's previous responses, Tran is disadvantageous, as its configuration would require additional design complexity, such as additional layers of metallization to connect N-type and P-type transistors, as opposed to embodiments in accordance with, for example, claim 1, as amended.

However, as was previously indicated, Applicant has amended claim 1 to further clarify and distinguish this claim from the cited patent. The other independent claim, 21, has been similarly amended. Applicant, however, respectfully reserves the right to pursue the original claim language on any subsequent appeal. In this regard, claim 1, as amended, for example, now specifically recites:

An integrated circuit comprising: a gate array architecture;
said gate array architecture including a semiconductor substrate having a plurality of N-type diffusion regions and P-type diffusion regions; said diffusion

regions having partially overlying polysilicon landing sites, at least on forming both N-type and P-type transistors;

wherein the regions are relatively-sized to form two distinct transistor sizes, smaller N- and P-type transistors and larger N- and P-type transistors;

successive rows of small diffusion regions are followed by successive rows of regular-sized diffusion regions; and

immediately successive rows within similarly-sized diffusion regions have opposite polarity.

Applicant respectfully asserts that this amendment further distinguishes claim 1 from the cited patent in at least the respect that Tran does not disclose "partially overlying polysilicon landing sites, at least one forming both N-type and P-type transistors."

Based on the foregoing, it is respectfully asserted that Tran would not render claim 1, as amended, obvious to one of ordinary skill in the art. Specifically, one of ordinary skill having this patent before him or her would be unable to produce the invention as recited in claim 1, as amended, for at least the reasons discussed above. Therefore, it is respectfully requested that the Examiner withdraw his rejection.

Claims 2-11 depend from and include all the limitations of claim 1, as amended. Therefore, it is respectfully asserted that these claims distinguish from the cited patent on the same basis as claim 1, as amended. It is respectfully requested that the Examiner withdraw his rejection of claims 2-11.

The Examiner has also rejected claim 21-26 under 35 U.S.C. § 103(a) on Tran on the same basis as the Examiner's rejection of claims 1-11. In this regard, Applicant respectfully points out that claim 21, as amended, contains similar limitations to those discussed above with respect to claim 1, as amended. Therefore, it is respectfully asserted that claim 21, as amended, patently distinguishes from Tran for similar reasons as discussed above regarding claim 1, as amended. It is respectfully requested that the Examiner withdraw his rejection.

Claims 22-26 depend from and include all the limitations of claim 21, as amended. Therefore, it is respectfully asserted that these claims distinguish from the cited patent on the same basis as claim 21, as amended. It is respectfully requested that the Examiner withdraw his rejection of claims 22-26.

Applicant has added claims 27-43. Applicant respectfully asserts that there is adequate support in the specification for these claims. Such support may be found, for example, on page 7, lines 6-31, and in Fig. 1 of the application. Applicant also asserts that these claims patentably distinguish from the cited patent for at least the reasons discussed above with respect to claims 1-11 and 21-26. Claims 27 and 38, the added independent claims, also further distinguish from Tran in the additional aspect that "the relatively sized P-type diffusion

regions [ar] substantially adjacent" as is illustrated in Fig. 1, for example. As those of skill in the art would be aware, this additional aspect of these claims may be advantageous in a number of respects. For example, having substantially adjacent relatively sized P-type diffusions may allow such diffusions to be located within the same n-well. This, in turn, may result in a reduction in the area, such as silicon area, for example, employed by such embodiments, and, therefore, a reduction in manufacturing costs. Based on the foregoing, Applicant respectfully asserts that claims 27 and 38 are patentable. It is, therefore, respectfully requested that the Examiner enter and allow these claims.

Claims 28-37 and 39-43 depend from and include all the limitations of claim 27 and 38, respectively. Therefore, it is respectfully asserted that these claims are patentable on the same basis as those claims. It is respectfully requested that the Examiner enter and allow these claims.

CONCLUSION

In view of the foregoing, it is respectfully asserted that all of the claims pending in the application, as amended, are in condition for allowance. If the Examiner has any questions, he is invited to contact the undersigned at (503) 712-1848. Reconsideration of the application and early allowance of all the claims, as amended, is respectfully requested.

Respectfully submitted,



Paul W. Churilla
Reg. No. P-47,495

Dated:

c/o Blakely, Sokoloff, Taylor & Zafman, LLP
12400 Wilshire Blvd., Seventh Floor
Los Angeles, CA 90025-1026

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